



OVERTIME, AUSTRALIA, FEBRUARY 1987

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MAIN FEATURES

In the February 1987 survey week, average weekly overtime hours paid for were 1.19 hours per employee, a decrease of 0.10 hours on the November 1986 average.

Although reductions were recorded for average weekly overtime hours in all States except Tasmania, only those in Queensland and South Australia were statistically significant. With respect to industry estimates, only Electricity, gas and water, Wholesale trade and 'Other' industries recorded statistically significant movements, all decreases from November 1986.

There has been no significant change in average weekly overtime hours per employee working overtime between November 1986 and February 1987 but the percentage of employees working overtime declined from 18.68 per cent to 17.46 per cent.

EXPLANATORY NOTES

Introduction

1. This publication contains results of a sample survey first introduced in November 1983. The survey, which is conducted by telephone, obtains from employers information on overtime in respect of the last pay period ending on or before the third Friday of the middle month of the calendar quarter.

2. Estimates contained in this publication are not strictly comparable with those obtained prior to November 1983. Background information about the overtime series is provided in *Information Paper: New Statistical Series: Employment, Average Weekly Earnings, Job Vacancies and Overtime* (6256.0) issued on 21 June 1984.

Scope of the survey

3. All wage and salary earners are represented in the survey, except:

- members of the Australian permanent defence forces;
- employees of enterprises primarily engaged in agriculture, forestry, fishing and hunting;
- employees in private households employing staff;
- employees of overseas embassies, consulates, etc.;

- employees based outside Australia;
- employees on workers' compensation who are not paid through the payroll;
- directors who are not paid a salary;
- proprietors/partners of unincorporated businesses who are not paid a salary;
- self-employed persons such as subcontractors, owner/drivers, consultants and persons paid solely by commission without a retainer.

Survey design

4. A sample of approximately 4,300 employers is selected from the ABS register of businesses to ensure adequate State and industry representation. The sample is updated each quarter to take account of new businesses, those which have ceased operation and structural changes such as takeovers and mergers. The statistical unit for the survey comprises all activities of an enterprise in a particular State or Territory. Each statistical unit is classified to an industry which reflects the predominant activity of the enterprise in the State or Territory. In a small number of cases where an enterprise has significant employment in more than one industry, a separate statistical unit is created for each industry. The statistical units are stratified by State, industry and size of employment and a simple random sample is selected from each stratum.

Definitions

5. *Reference period* for the survey is the last pay period ending on or before the third Friday of the middle month of the quarter. For the most recent survey this date was 20 February 1987.

6. *Overtime* is time worked in excess of award, standard or agreed hours of work for which payment is received. Excluded is any overtime for which employees would not receive payment, e.g. unpaid overtime worked by managerial, executive, etc., staff, normal shiftwork and standard hours paid for at penalty rates.

7. *Overtime hours* represent the number of hours of overtime paid for. Respondents are instructed not to convert overtime hours to their ordinary time equivalent. For example, 100 hours of overtime paid for at time and a half and 20 hours at double time would be counted as 120 hours, not 190. For the new survey, overtime is defined in

respect of hours paid for compared to hours worked in the previous surveys, a change in definition which has not affected the estimates significantly.

8. *Average hours of overtime per employee working overtime* is calculated by dividing total overtime hours paid for in a particular group (e.g. industry, State or Territory) by the number of employees who were paid for overtime in the same group.

9. *Average hours of overtime per employee in the survey* is calculated by dividing total overtime hours paid for in a particular group by the total number of employees in the same group (including those who were not paid for any overtime).

10. *Number of employees* is the number on the payroll on the last day of the pay period ending on or before the survey date. Included are persons on paid leave (recreation leave, sick leave, long service leave, etc.). Excluded are persons on leave without pay, and persons on strike, locked out or stood down as a result of an industrial dispute, for the whole of the reference period.

Reliability of estimates

11. As the estimates in this publication are based on information relating to a sample of employers rather than a full enumeration, they are subject to sampling variability. That is, they may differ from the figures that would have been produced if the information had been obtained from all employers. This difference, called *sampling error*, should not be confused with inaccuracy that may occur because of imperfections in reporting by respondents or in processing by ABS; such inaccuracy is referred to as *non-sampling error* and may occur in any enumeration, whether it be a full count or sample. Efforts have been made to reduce non-sampling error by careful design of questionnaires, detailed checking of returns and quality control of processing.

12. The sampling error associated with any estimate can be estimated from the sample results. One measure of sampling error is given by the *standard error* which indicates the degree to which an estimate may vary from the value that would have been obtained from a full enumeration (the 'true' figure). There are about two chances in three that a sample estimate differs from the true value by less than one standard error, and about nineteen chances in twenty that the difference will be less than two standard errors.

13. If the standard error of an estimate is large relative to the size of the estimate, the usefulness of that estimate is seriously impaired.

14. An example of the use of standard error for the February 1987 estimates is as follows. Table 1 shows the estimated average overtime hours per employee in the survey for Australia for February 1987 is 1.19 with a standard error of 0.03. Therefore there are about two

chances in three that a full enumeration would have given a figure in the range 1.16 to 1.22 and about nineteen chances in twenty that it would be in the range 1.13 to 1.25.

Industry classification

15. Industry is classified according to the *Australian Standard Industrial Classification (ASIC) 1983 Edition, Volume 1—The Classification (1201.0)*.

Seasonal Factors

16. Overtime figures at different dates may be affected by seasonal influences. Publication of seasonally adjusted figures will not be possible until results of surveys for several years are available.

Related publications

17. Users may also wish to refer to the following publications which are available on request:

Information Paper: New Statistical Series: Employment, Average Weekly Earnings, Job Vacancies and Overtime (6256.0)

Average Weekly Earnings, States and Australia (6302.0)—issued quarterly

Job Vacancies, Australia (6231.0)—issued quarterly

The Labour Force, Australia (6203.0)—issued monthly (\$1.80)

Employed Wage and Salary Earners, Australia (6248.0)—issued quarterly

18. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia (1101.0)*. The ABS also issues, on Tuesdays and Fridays, a *Publications Advice (1105.0)* which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

Unpublished statistics

19. In some cases, the ABS can also make available information which is not published. This information may be made available in one or more of the following forms: microfiche, photocopy, data tape, computer print-out, clerically-extracted tabulation. Generally, a charge is made for providing unpublished information. Inquiries should be made to the officer whose name appears in the *Phone Inquiries* section of the Inquiries box at the front of this publication, or to Information Services in the nearest ABS office.

Symbols and other usages

- * subject to sampling variability too high for most practical purposes.

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TABLE 1. OVERTIME: STATES AND TERRITORIES

Reference period— pay period ending on or before	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE(a)									
1985— 15 November	1.13	1.56	1.33	1.36	1.15	1.27	1.43	1.07	1.30
1986— 21 February	1.14	1.44	1.13	1.31	1.20	1.33	1.54	1.05	1.25
16 May	1.16	1.41	1.19	1.04	1.18	1.26	1.75	1.09	1.23
15 August	1.12	1.22	1.18	1.08	1.10	1.14	1.78	0.98	1.16
21 November	1.19	1.40	1.36	1.27	1.21	1.46	1.95	0.99	1.29
1987— 20 February	1.11	1.38	1.16	1.01	1.13	1.46	1.76	0.91	1.19
Standard error(b)	0.05	0.07	0.07	0.07	0.15	0.07	0.20	0.08	0.03
AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE WORKING OVERTIME(a)									
1985— 15 November	6.88	7.34	6.81	6.48	6.64	7.18	7.07	6.83	6.96
1986— 21 February	6.85	7.03	6.11	6.73	6.97	7.32	7.60	6.73	6.80
16 May	6.69	7.18	6.58	5.85	6.58	7.01	8.01	7.01	6.76
15 August	6.57	6.92	6.54	5.67	6.88	6.67	8.14	6.54	6.62
21 November	6.73	7.19	6.96	6.46	6.93	7.30	8.83	6.41	6.92
1987— 20 February	6.69	7.26	6.45	6.23	6.72	7.57	8.68	6.54	6.83
Standard error(b)	0.14	0.22	0.20	0.17	0.67	0.21	0.63	0.49	0.10
PERCENTAGE OF EMPLOYEES WORKING OVERTIME(a)									
1985— 15 November	16.43	21.26	19.51	21.00	17.25	17.65	20.29	15.68	18.68
1986— 21 February	16.69	20.41	18.57	19.54	17.21	18.13	20.22	15.56	18.33
16 May	17.29	19.56	18.05	17.70	17.99	17.92	21.90	15.52	18.14
15 August	17.08	17.69	18.01	19.09	16.00	17.06	21.84	14.94	17.48
21 November	17.76	19.51	19.49	19.74	17.44	19.93	22.08	15.49	18.68
1987— 20 February	16.59	18.96	18.01	16.24	16.75	19.23	20.28	14.00	17.46
Standard error(b)	0.71	0.79	0.88	1.23	0.95	0.91	1.52	1.18	0.38

(a) For definitions see paragraphs 5 to 10. (b) Standard error for latest level estimate, and an approximate measure of the standard error of movement between the latest two survey results. See paragraphs 11 to 14.

TABLE 2. AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE(a): MANUFACTURING

Reference period— pay period ending on or before	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1985— 15 November	2.56	3.06	1.87	2.47	2.46	2.32	3.04	(c)3.34	2.64
1986— 21 February	2.50	2.89	2.05	2.55	2.37	2.29	4.16	3.29	2.59
16 May	2.51	2.72	2.07	1.84	(c)2.77	2.12	3.12	(c)2.69	2.47
15 August	2.53	2.41	1.97	1.77	2.08	1.87	(c)3.29	(c)2.46	2.30
21 November	2.70	3.00	2.27	2.54	2.45	2.88	2.93	(c)2.40	2.73
1987— 20 February	2.28	3.12	2.17	2.28	*	2.75	3.06	(c)2.85	2.56
Standard error(b)	0.15	0.21	0.21	0.11	*	0.17	0.59	0.70	0.11

(a) For definitions see paragraphs 5 to 10. (b) Standard error for latest level estimate, and an approximate measure of the standard error of movement between the latest two survey results. See paragraphs 11 to 14. (c) Relative standard error greater than 20 per cent but less than 30 per cent.

TABLE 3. OVERTIME BY INDUSTRY

	Reference period — pay period ending on or before						
	1985	1986				1987	
Industry	15 November	21 February	16 May	15 August	21 November	20 February	Standard error (a)
AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE(b)							
Mining	4.35	4.07	4.26	4.46	4.12	4.28	0.43
Manufacturing	2.64	2.59	2.47	2.30	2.73	2.56	0.11
Food, beverages and tobacco	2.88	3.19	2.82	2.68	2.90	2.86	0.41
Textiles; clothing and footwear	(c)2.00	1.87	(c)1.61	1.84	2.14	(c)2.37	0.49
Paper, printing, etc.	1.68	1.21	1.30	1.23	1.67	1.45	0.17
Chemical, petroleum and coal products	2.11	1.97	2.07	2.13	2.36	2.40	0.40
Basic metal products	4.02	4.35	3.90	3.78	4.37	4.26	0.14
Fabricated metal products; other machinery, etc.	2.61	2.51	2.54	2.45	2.81	2.47	0.22
Transport equipment	2.95	2.97	2.75	2.22	2.56	2.52	0.09
Other manufacturing	2.84	2.63	2.64	2.15	3.02	2.60	0.23
Electricity, gas and water	1.89	1.76	1.67	1.66	1.57	1.51	0.02
Construction	2.12	1.78	1.78	1.70	1.84	1.96	0.22
Wholesale trade	0.99	1.14	1.01	0.87	1.35	1.07	0.11
Retail trade	0.72	0.72	0.69	0.68	0.72	0.64	0.05
Transport and storage; communication	2.45	2.34	2.48	2.13	2.35	2.18	0.10
Public administration and defence(d)	0.66	0.73	0.74	0.63	0.73	0.69	0.04
Community services	0.34	0.35	0.37	0.36	0.34	0.35	0.02
Other(e)	(c)0.73	0.54	0.50	0.68	(c)0.73	0.46	0.06
All industries	1.30	1.25	1.23	1.16	1.29	1.19	0.03
AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE WORKING OVERTIME(b)							
Mining	9.63	8.90	9.22	9.53	9.13	9.30	0.40
Manufacturing	7.78	7.97	7.84	7.34	7.67	7.74	0.22
Food, beverages and tobacco	7.25	7.63	7.33	6.98	6.73	6.62	0.81
Textiles; clothing and footwear	7.66	7.14	7.92	6.99	7.11	9.08	0.73
Paper, printing, etc.	7.06	6.61	6.61	6.54	6.52	7.60	0.68
Chemical, petroleum and coal products	7.99	7.82	8.65	8.15	8.56	8.96	0.60
Basic metal products	9.39	10.79	9.33	8.87	9.73	9.70	0.12
Fabricated metal products; other machinery, etc.	7.13	7.36	7.49	7.22	7.39	7.00	0.34
Transport equipment	8.69	9.08	8.44	7.72	8.01	7.92	0.23
Other manufacturing	8.19	7.91	7.93	7.07	8.41	8.04	0.43
Electricity, gas and water	7.07	7.38	7.00	6.88	6.84	6.89	0.05
Construction	8.00	7.57	7.04	7.96	8.19	8.75	0.50
Wholesale trade	6.22	7.20	6.57	5.86	7.40	6.35	0.35
Retail trade	4.08	4.03	3.87	3.90	4.02	3.97	0.15
Transport and storage; communication	7.83	7.42	7.88	7.34	7.85	7.66	0.18
Public administration and defence(d)	5.27	5.42	5.26	5.27	5.54	5.08	0.17
Community services	5.92	6.17	6.01	6.29	5.72	6.06	0.13
Other(e)	6.52	5.06	5.24	5.96	6.41	5.23	0.34
All industries	6.96	6.80	6.76	6.62	6.92	6.83	0.10
PERCENTAGE OF EMPLOYEES WORKING OVERTIME(b)							
Mining	45.23	45.67	46.15	46.80	45.15	45.96	3.24
Manufacturing	33.87	32.50	31.54	31.32	35.52	33.12	0.94
Food, beverages and tobacco	39.69	41.77	38.44	38.35	43.03	43.28	2.61
Textiles; clothing and footwear	26.05	26.18	20.30	26.31	30.13	26.07	3.87
Paper, printing, etc.	23.74	18.36	19.72	18.78	25.69	19.07	1.74
Chemical, petroleum and coal products	26.37	25.24	23.99	26.17	27.57	26.78	3.86
Basic metal products	42.77	40.36	41.84	42.61	44.90	43.89	1.01
Fabricated metal products; other machinery, etc.	36.64	34.08	33.94	33.96	38.02	35.34	2.41
Transport equipment	33.92	32.73	32.54	28.75	32.01	31.74	1.22
Other manufacturing	34.63	33.28	33.31	30.43	35.88	32.33	1.79
Electricity, gas and water	26.76	23.80	23.84	24.18	22.96	21.95	0.21
Construction	26.53	23.55	25.35	21.40	22.41	22.44	2.08
Wholesale trade	15.95	15.85	15.30	14.89	18.30	16.77	1.52
Retail trade	17.60	17.77	17.75	17.49	17.91	16.18	0.93
Transport and storage; communication	31.27	31.52	31.47	29.01	29.92	28.43	0.88
Public administration and defence(d)	12.60	13.41	13.97	12.04	13.21	13.55	0.73
Community services	5.68	5.71	6.16	5.69	5.98	5.70	0.36
Other(e)	11.16	10.69	9.54	11.44	11.43	8.83	1.06
All industries	18.68	18.33	18.14	17.48	18.68	17.46	0.38

(a) Standard error for latest level estimate, and an approximate measure of the standard error of movement between the last two survey results. See paragraphs 11 to 14.
 (b) For definitions see paragraphs 5 to 10. (c) Relative standard error greater than 20 per cent but less than 30 per cent. (d) Excludes permanent defence forces.
 (e) Includes Finance and business services and Recreation and personal services.